1015-35-112 **Nikolaos Tzirakis*** (tzirakis@math.toronto.edu), 350 Wellington St. West, Apt #M09, Toronto, Ontario M5V3W9, Canada. *Improved global well-posedness for the Zakharov and Klein-Gordon-Schrödinger systems.*

In this talk I will prove low-regularity global well-posedness for the 1d Zakharov (Z) and 1d, 2d, and 3d Klein-Gordon-Schrödinger system (KGS), which are systems in two variables (u, n). Z is known to be locally well-posed in $(u, n) \in L^2 \times H^{-1/2}$ and KGS is known to be locally well-posed in $(u, n) \in L^2 \times L^2$. I will show that Z and KGS are globally well-posed in these spaces, respectively, by using an available conservation law for the L^2 norm of u and controlling the growth of n via the estimates in the local theory. This is joint work with Jim Colliander and Justin Holmer. (Received January 31, 2006)